AMENDMENTS

Amendments to the Claims

Please amend the claims according to the following listing of the claims.

Listing of the claims

1. (currently amended) An apparatus for optically determining distance, wherein the apparatus comprises:

(i) at least one collimating optical element,

wherein the at least one collimating optical element has an optical axis; and

(ii) at least two focusing optical elements,

wherein each of the at least two focusing optical elements has an optical axis,

wherein the optical axes of the focusing optical elements are aligned parallel to the optical axis of the at least one collimating optical element, and

wherein at least two optical axes of the focusing optical elements are not collinear;

wherein light is directed through the at least one collimating optical element that collimates in the direction of a reflecting surface, through the at least two focusing optical elements that focus in the direction of the reflecting surface, and onto the reflecting surface that reflects the light, and

wherein the light is directed through a first optical fiber, through the at least one collimating optical element that collimates in the direction of the reflecting surface, through the at least two focusing optical elements that focus in the direction of the reflecting surface, onto the reflecting surface that reflects the light through the first optical fiber to an optical detector, or optionally through a second optical fiber to an optical detector, and

wherein the detector is a detector for measuring the intensity of the reflected light from the reflecting surface.

2. (previously presented) The apparatus as claimed in claim 1, wherein several focusing optical elements form a row arrangement along an axis or form an array arrangement in a number of rows.

3. (previously presented) The apparatus as claimed in claim 1, wherein the focusing optical elements are arranged equidistantly from one another.

4. (previously presented) The apparatus as claimed in claim 1, wherein the focusing optical elements are arranged at a constant distance from the collimating optical element.

5. (previously presented) The apparatus as claimed in claim 1, wherein the focusing optical elements are constructed as cylindrical lenses.

6. (previously presented) The apparatus as claimed in claim 1, wherein the convex surfaces of the focusing optical elements are aspherically curved.

7. (previously presented) The apparatus as claimed in claim 1, wherein the collimating optical element is a plano-convex optical lens.

8. (previously presented) The apparatus as claimed in claim 1, wherein the convex

surface of the collimating optical element is aspherically curved.

9. (previously presented) The apparatus as claimed in claim 1 wherein light is directed through a first optical fiber, through the at least one collimating optical element that collimates in the direction of the reflecting surface, through the at least two focusing optical elements that focus in the direction of the reflecting surface, onto the reflecting surface that reflects the light through the first optical fiber to an optical detector, or optionally through a second optical fiber to an optical detector, and wherein an end face of at least one second optical fiber, into which the reflected light can be coupled, is arranged immediately next to an end face of the first optical fiber from which light from a light source exits.

10. (previously presented) The apparatus as claimed in claim 1, wherein light is directed through a first optical fiber, through the at least one collimating optical element that collimates in the direction of the reflecting surface, through the at least two focusing optical elements that focus in the direction of the reflecting surface, onto the reflecting surface that reflects the light through the first optical fiber to an optical detector, or optionally through a second optical fiber to an optical detector, and wherein the appartus further comprises a fiber brancher/backward coupler connected to the first optical fiber, such that light reflected from the reflecting surface can be coupled into the first optical fiber and can impinge on the optical detector.

11. (previously presented) The apparatus as claimed in claim 1, wherein light is directed through a first optical fiber, through the at least one collimating optical element that collimates in the direction of the reflecting surface, through the at least two focusing optical elements that focus in the direction of the reflecting surface, onto the reflecting surface that reflects the light through the first optical fiber to an optical detector, or optionally through a second optical fiber to an optical detector, and wherein the end face(s) of the first optical fiber and/or the at least one further optical fiber is/are aligned orthogonal to the optical axis of the

collimating optical element.

12. (previously presented) The apparatus as claimed in claim 1, wherein light is directed through a first optical fiber, through the at least one collimating optical element that collimates in the direction of the reflecting surface, through the at least two focusing optical elements that focus in the direction of the reflecting surface, onto the reflecting surface that reflects the light through the first optical fiber to an optical detector, or optionally through a second optical fiber to an optical detector, and wherein the first optical fiber and/or the at least one further optical fiber is/are in each case aligned at an obliquely inclined angle with reference to the optical axis of the collimating optical element.

13. (previously presented) The apparatus as claimed in claim 1, wherein light is directed through a first optical fiber, through the at least one collimating optical element that collimates in the direction of the reflecting surface, through the at least two focusing optical elements that focus in the direction of the reflecting surface, onto the reflecting surface that reflects the light through the first optical fiber to an optical detector, or optionally through a second optical fiber to an optical detector, and wherein the first optical fiber and/or the at least one further optical fiber is/are arranged offset from the optical axis of the collimating optical element.

14. (previously presented) The apparatus as claimed in claim 1, wherein light is directed through a first optical fiber, through the at least one collimating optical element that collimates in the direction of the reflecting surface, through the at least two focusing optical elements that focus in the direction of the reflecting surface, onto the reflecting surface that reflects the light through the first optical fiber to an optical detector, or optionally through a second optical fiber to an optical detector, and wherein a transmission grating is constructed on the end face of the first optical fiber.

15. (previously presented) The apparatus as claimed in claim 1, wherein the light originates from a light source, and wherein the light source is an LED or a laser diode.

16. (previously presented) The apparatus as claimed in claim 1, wherein the reflecting surface is a part of a pellicle or is arranged on a pellicle.

17. (previously presented) The apparatus as claimed in claim 1, wherein free spaces are present between focusing optical elements or through holes are constructed.

18. (previously presented) The apparatus as claimed in claim 1, wherein at least one further beam-shaping optical element is arranged between a collimating optical element and focusing optical elements, or beam-shaping elements are integrated in the collimating optical element.

19. (previously presented) The apparatus as claimed in claim 18, wherein the beam-shaping optical element is a telescope array arrangement.

20. (previously presented) The apparatus as claimed in claim 18, wherein the beam-shaping optical element(s) is/are diffractive or refractive optical elements.

21. (previously presented) The apparatus as claimed in claim 1, wherein the apparatus forms an optical microphone.